DRIVER

JANUARY 1973

INTERNATIONAL AUTO SHOW

Driving in Tidewater, Virginia

DRIVER

A snug colonial home in the restored village of Williamsburg.

One of America's earliest churches in Yorktown, Virginia. Yorktown is the site of the British surrender highlighting Colonial America's struggle for independence.

(left)
A statue of Captain John Smith portrays the leader staring boldly toward the James River. In the background are remains of the only original Jamestown building, a church.

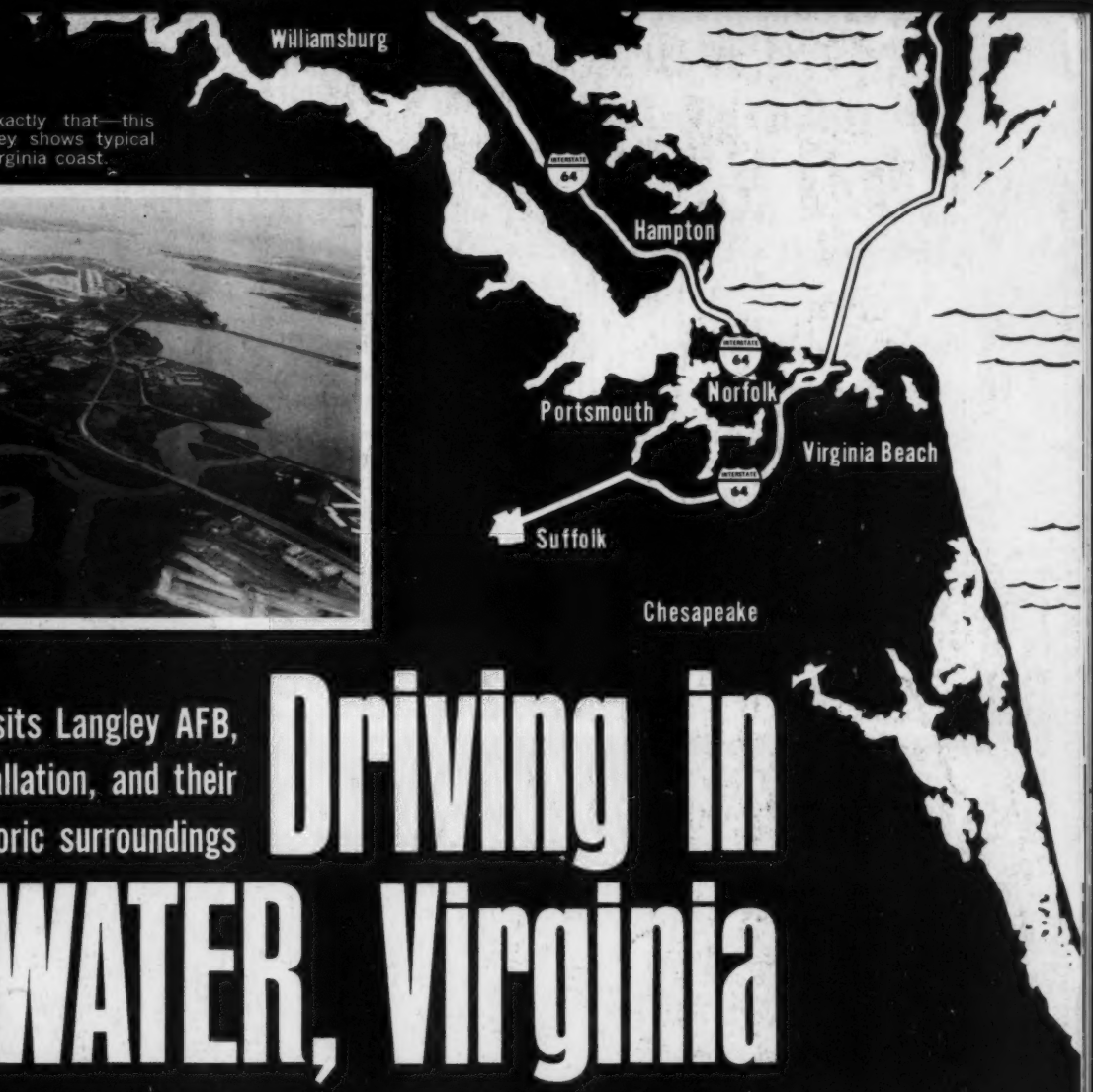
NORFOLK
NAVAL BASE

Norfolk is home port for some 133 ships —there is always plenty of action in the fleet area.

LANGLEY
AIR FORCE BASE

Langley's infamous "Maze" and t three-lane traffic system.

"Tidewater" means exactly that—this aerial shot near Langley shows typical inundation along the Virginia coast.



DRIVER visits Langley AFB, Norfolk Naval Installation, and their historic surroundings

Driving in TIDEWATER, Virginia

More than 3½ centuries ago Captain John Smith and 143 others sailed from England to found a colony. This settlement, Jamestown, established the coastal area known today as Tidewater, Virginia,* as the cultural heart of the United States.

Most of our nation's early history happened in the Tidewater—including the British surrender at the battle of Yorktown. So it seems quite natural that today, Tidewater, Virginia, is the home of one of the United States' largest military complexes.

Every branch of the United States military is represented within the Tidewater area. The world's largest naval installation and a very important Air Force base are in the heart of the Tidewater, only minutes apart. The U.S. Coast Guard headquarters its Fifth District here. The U.S. Army is represented by historic, moat-protected Fort Monroe, from which the Continental Army Command controls the free world's largest military training establishment. Also represented are the Army's essential transportation center at Fort Eustis and the spot where Jamestown settlers first set foot in the New World at Fort Story.

With so many military personnel concentrated in this area, there is a good chance many of you will get a shot at driving in Tidewater, Virginia. Even if your military travels never send you in this direction, you might plan to vacation in this historic part of the country with its many types of recreation. In either case, most people will find driving in this area intriguing and fun—but sometimes a bit challenging.

Getting to the Tidewater area is both pleasant and easy. Modern interstate systems offer inviting routes into Virginia's Capital, Richmond, from four directions. Interstate 64 leads quickly into the heart of the Tidewater from Richmond. Numerous scenic two-lane and four-lane-divided

continued

**The area known as Tidewater, Virginia, is contained within a circle roughly 50 miles in radius, with Norfolk as its hub. It stretches from Virginia Beach in the east to Suffolk in the west, and from Yorktown in the north to Chesapeake in the south (see Tidewater map). The term, "tidewater," refers to low-lying coastal land on which the ground-water table is so close to sea-level that flooded areas are affected by the ebb and flow of the oceanic tide.*

DRIVER

THE TRAFFIC SAFETY MAGAZINE FOR THE MILITARY DRIVER

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ABOUT INCREASED SUBSCRIPTION RATES

In this spot in the November DRIVER we made announcement of a change in subscription rates. Please **disregard** that notice. Government Printing Office officials are reexamining cost factors related to the proposed price increase. We will advise you of any permanent change in rates as soon as that information is available.

AFRP 127-1

SUBSCRIPTION DRIVER is available on subscription for $2.00 per year domestic; 50c additional for foreign mailing, 20c per copy, through the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Changes in subscription mailings should be sent to the above address. Single copies will be sold and back copies will be furnished when available. Use of funds for printing this publication has been approved by Headquarters, United States Air Force, Department of Defense, Washington, D.C. No payment can be made for manuscripts submitted for publication. Contributions are welcomed, as are comments and criticism. Address all correspondence to the Editor, DRIVER Magazine, AFISC/SEDD, Norton AFB CA 92409. ATTENTION DEPT OF THE NAVY PERSONNEL: Address all queries concerning distribution to NAVSAFECEN, NAS, NORFOLK, VA 23511, Attn: Safety Education Dept. All other correspondence will be welcomed by the Editor. The contents of this magazine are informative and should not be construed as regulations, technical orders, or directives unless stated. Address reprint requests, stating intended use of material, to the Editor. The Editor reserves the right to make any editorial changes in manuscripts which he believes will improve the material without altering the intended meaning.

THE EDITOR SPEAKS

DOUBLE CLUTCH

ON CHECKING OUT A VEHICLE

You might think the editor of "The Traffic Safety Magazine for the Military Driver" would be given a pretty good shake on a military vehicle to use in gathering material for a story. Not so. In fact, recent experience along these lines leads me to the following conclusion. When checking out a military vehicle, you are nuts not to **thoroughly** satisfy yourself that you have a safe, correctly functioning, fully-fueled vehicle before driving off. This is true no matter what your grade or position, or regardless of any prearrangements with the motor pool.

The vehicle I was assigned was tightly parked in a line of cars in a dark corner of the motor pool. The wind, freezing temperature, and darkness limited my inspection to some of the essentials, but herein is the catch. I was at fault for not moving the vehicle to a lighted area within the motor pool for a more thorough checkout. If I had, I would have been able to see that there was no jack, jack handle, or spare.

A road test of a borrowed motor pool vehicle is not always practical. But, if you plan to drive at highway speeds, allow time to return a faulty vehicle to the motor pool without being late to your destination. In the case of my vehicle, I found it not only had brakes which pulled to one side, but front-end shimmy as well. The clincher was a gas-gage needle stuck on ¾ full. Take it from me, if that needle doesn't move in about one hundred miles, **something's wrong**. Don't make the mistake of assuming the motor pool topped off the tank before releasing the car to you.

There is an important point to remember when checking out a military U-drive vehicle. It most likely has lots of miles on it from extended use by transients and one-time vehicle users, and may very likely be in a "handicapped" condition. Therefore, check it out even more thoroughly than you would a rental vehicle. Report any problems for prompt correction. You will be doing others a service as well as yourself. ●

Three cars try to squeeze through the complicated maze at the same time. Surprisingly, there are few accidents here—because motorists become supercautious when confronted by this unusual intersection.

continued

DRIVING IN TIDEWATER, VIRGINIA

roads provide more interesting routes into the area, but I-64 is the key access route to two of the bases military fortune is likely to dictate as future homes for many of you.

LANGLEY AFB

Take I-64 into Hampton, Virginia, and you will be at the home of the oldest continually active base in the United States. "Langley Field," as it is still referred to by locals and highway markers is a fitting host to Tactical Air Command (TAC) headquarters. The historic base is bordered on two sides by water, with Hampton, one of the earliest English-speaking settlements in America to the south. Langley is also home for the 316th Tactical Airlift Wing and the 48th Fighter Interceptor Squadron, as well as 17 other units. Also contained on the scenic, 8,500-acre base is the National Aeronautics and Space Administration (NASA) Langley Research Center, where the Mercury project was born.

Langley's old, narrow streets have grudgingly had to accommodate an ever-increasing burden of traffic over the years. After the base traffic pattern was analyzed in the late 1950s, a four-lane system was recommended. Money was tight, however, and the present three-lane system (middle lane reversible) evolved. But, even if the on-base traffic flow could be doubled, base egress time could be improved only about 60 seconds. This, according to Mr. Bertil Swanson, Langley Ground Safety Officer, is because of the inability of the off-base roads to handle an increase in traffic.

THE LANGLEY COURTESY CUSTOM

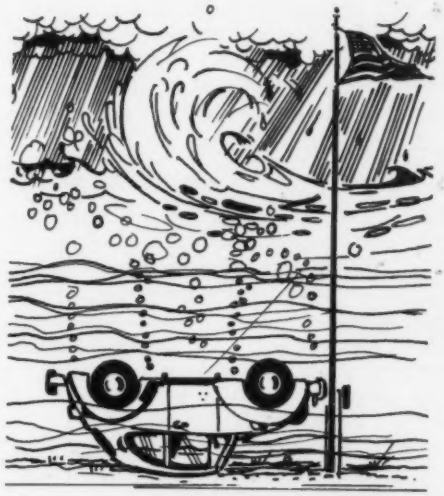
Driving at Langley isn't nearly as bad as it could be, however. Base personnel have responded to the increasing congestion in a rather remarkable way. One unusual practice, which developed at the super-crowded west gate, improves the base traffic flow as well as a driver's confidence in his fellow motorist. Base workers arriving from the off-base Bethal Manor housing area began yielding to people entering traffic from side streets. This "courtesy custom" has now spread to the entire base to some degree. The thoughtful practice is great for traffic, but could present a real problem for a base newcomer. Be prepared to take an offered right-of-way when entering a base road or turning left. Most importantly, be prepared to *give* the right-of-way; many Langley long-timers have come to expect it.

ANCHOR YOUR CAR?

Langley's coastal location provides for some unique on-base recreational activities at the base's boat rental and yacht club facilities. But, the marine locale also results in some unusual driving conditions. Seasonal rains often flood the low areas of the base, creating both a driving and a parking problem—parked cars have been known to float away during heavy rains. One VW was seen floating merrily along, over the parade ground,

Langley's "Old Wooden Bridge" was a source of many mishaps in wet or freezing weather. The potentially slick wooden bridge floor is now covered with an abrasive material which provides better traction.

during a rainstorm. The little car finally sank, however, after repeated bashings into the flag pole.



The moderate coastal climate also produces a serious driving situation in winter. Night temperatures sometimes reach freezing, producing a very hazardous road surface of wet ice for the unsuspecting early-morning driver. This was a problem at Langley's "Old Wooden Bridge" which tossed many

continued

continued

DRIVING IN TIDEWATER, VIRGINIA

drivers to the marsh below. The bridge floor is now covered with an abrasive material which has reduced the number of mishaps.

HAMPTON

After exploring the base, the first place you might head for is the historic city of Hampton. If you're used to freeway driving, don't expect it in Hampton. Interstate 64 provides some limited-access travel through Hampton, but much of your driving will be on two- and four-lane city streets.

The main commercial drag, the city route you are likely to be traveling most often, is the rather unusual Mercury Boulevard. Mercury contains a couple of tricky traffic circles—your best bet is to pull off and take a look at what happens before getting on the merry-go-round. The other odd feature of driving on Mercury is a six-lane, two-way traffic system which has center express lanes and outside lanes for commercial access. The only problem is that many popular commercial areas do not always have convenient entrances. This creates a situation where motorists often miss their destined stops. Some of them will suddenly cross several lanes, then make an abrupt left turn to head in the opposite direction.

ON TO NORFOLK NAVAL BASE

If you drive through Hampton on I-64 and cross the James River by way of the Hampton Roads bridge-tunnel, you will be on your way to the world's largest naval installation. Crossing the bridge, you get a glimpse of the massive home of nearly 20,000 military personnel and home port for 133 ships.

The Navy's Atlantic Fleet and Fifth Naval District are commanded from Norfolk. The Armed Forces Staff College and Allied Atlantic Command are important functions located at Norfolk. The Naval Air Station with its Naval Air Rework Facility (NARF) is one of the most important elements of the complex. The Oceana Naval Air Station, Norfolk Naval Shipyard, and Little Creek Amphibious Base are affiiliated installations nearby.

Congestion is also a primary traffic problem at both the Norfolk Naval Station and the adjoining Air Station. Road construction projects, both on- and off-base, add to the traffic-flow problems they will hopefully alleviate in the future. Be especially careful of these areas when driving either on or off the base.

One base area which presents a definite hazard is the Gate 4 exit on the Air Station. This is the exit for the main route into Norfolk and toward Ocean View, a popular residential area. To exit here, you must cross two lanes of inbound traffic and a 3-foot median strip before merging with the outbound traffic. To top it off, visibility is very poor. Avoid this nightmare by using the newly opened Gate 10.

The base rush hours bring a very different driving situation both on and off base. Traffic instantly jams up on the base, and local entrances and exits on the I-64 system back up as far as 3 miles. Take plenty of time when driving to and from the base. There have been several recent fatal accidents on I-64 near the base, and the current construction makes certain areas even more congested.

DOWNTOWN NORFOLK

When you decide to venture off-base for the first time, expect heavy traffic and congested streets. Motorists in Norfolk seem to be a little more aggressive than those in the rest of the Tidewater driving area. Don't wonder if people will pull out in front of you or turn without regard to traffic—count on it.

In Norfolk, as in Hampton, preplanning pays off. Street patterns are often historically archaic, generally confusing, and always congested.

There are a couple of unusual situations in Norfolk which provide additional hazards for the newcomer. Be especially alert for city buses (non-yellow) transporting school children; these buses are poorly marked, and therefore difficult to spot. Watch for children darting across the street from a stopped bus. Another possible disaster area is the pedestrian crosswalk. Legally, the motorist must stop for pedestrians crossing in marked areas —but few do. At these crossings a complex game of chicken usually develops. As a driver, your best bet is to always stop for pedestrians; and, when on foot, make sure all traffic lanes are clear before crossing.

COAL TRAINS

One of Norfolk's most confusing traffic situations occurs when coal trains block crossings for long periods.

The trains seem to have a habit of doing this at very inconvenient times,

HOME PORTS

(right)
The fleet landing area is one of the base's most congested areas—avoid it during heavy activity.

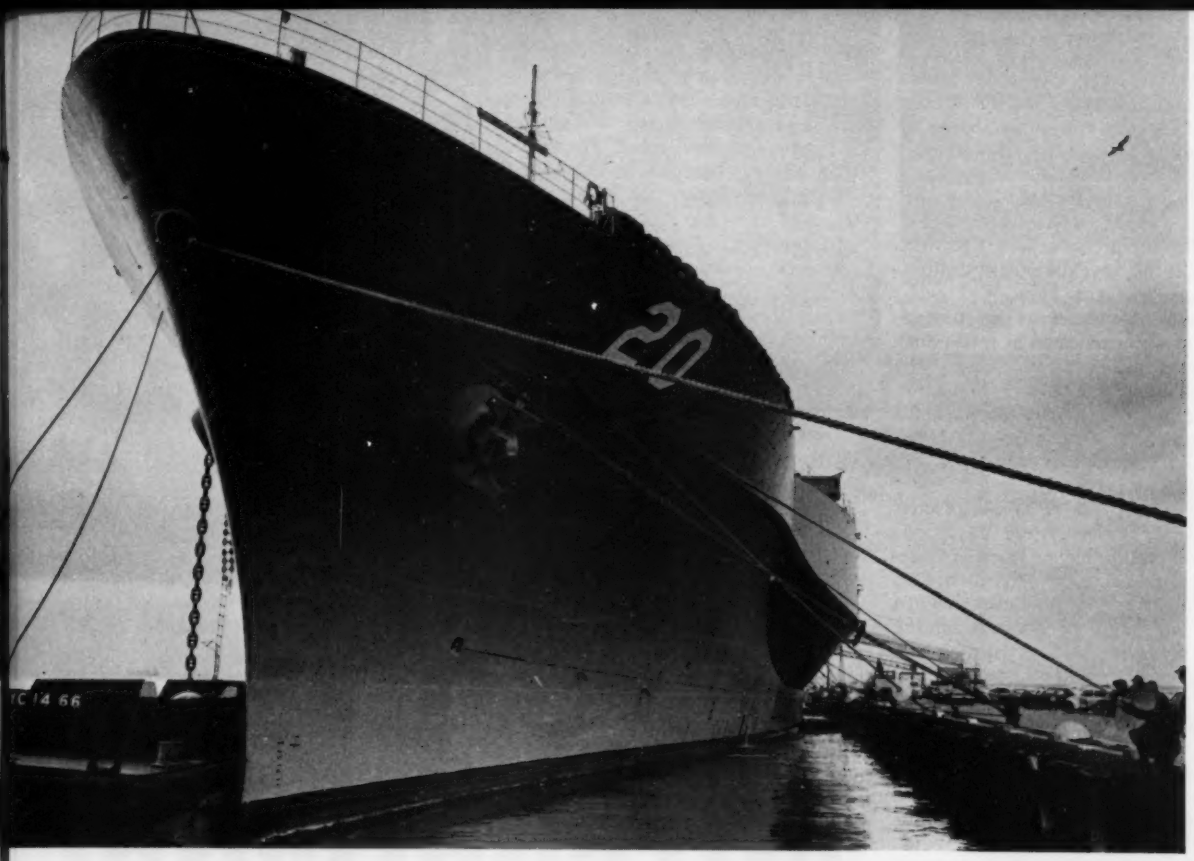
(below)
Langley's proximity to water provides many interesting recreational possibilities, including an on-base yacht club and boat rental facilities. Rather unusual for an Air Force base.

Service vehicles operating at Norfolk's fleet landing area and the Naval Air Rework Facility are potential driving hazards.

(U.S. Navy photograph)

(right)
Completion of the I-64 system is expected to improve the traffic flow to and from the massive Norfolk Naval installation.

(U.S. Navy photograph)



making people late for work and other appointments. When the track finally clears—a mad scramble ensues. Watch out for people trying to cut into the traffic flow from side streets, parking lots, and even ditches, while other people try to cut off those cutting in.

continued on page 25

(right)
Traffic circles are one of the unusual aspects of driving in the Tidewater. For the newcomer, it's best to pull off and watch the action before attempting to run the gamut.

INTERNATIONAL

IF you dig the way today's cars look . . . better get one before 1975. On the other hand, if you're interested in a safer, but possibly less aesthetically pleasing vehicle—wait for the '75-model cars. This was the consensus of opinion among the automotive experts DRIVER spoke to at this year's Southern California International Auto Show.

As usual, new trends in the automotive world were indicated at the annual Los Angeles exhibition. With the 1975 Federal Automotive Safety Standards still uncertain, most manufacturers are anticipating various degrees of design change to meet whatever may come.

1975 SAFETY STANDARDS

Smaller cars will be most affected by future Federal Safety Standards which will require higher levels of crash resistance and passenger protection. One foreign car representative even felt his line of cars might be doomed for the U.S. market after 1975. According to a Volkswagen spokesman, the VW "Beetle," as we know it today, will no longer exist in '75 without a breakthrough in present design technology.

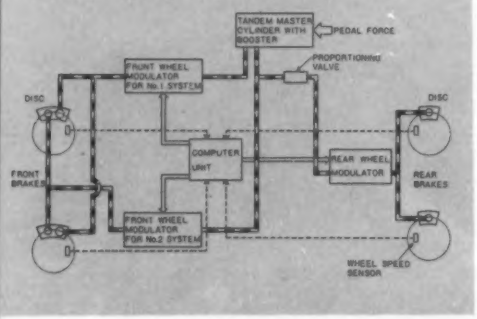
Intermediate and full-sized cars are not expected to undergo any radical design changes to meet the upcoming standards. The 1976 compacts, however, are likely to resemble today's intermediates.

ESVs/ESC

The Federal Safety Standard changes targeted for the 1975-model year will evolve from the results of extensive testing being carried out on specially designed Experimental Safety Vehicles (ESVs). Several of these ESVs were on display at the show.

One revolutionary feature of the Toyota ESV, which could have industry-wide impact and reduce significantly the number of one-car accidents, is the electric skid control (ESC). Sensors on all four wheels feed wheel speed and roll-resistance inputs into a central computer. The computer advises an actuator of the optimum wheel speed. The actuator then adjusts the speed by altering hydraulic pressure in the brake system. The ESC prevents skidding on slippery surfaces, and decreases braking distances on all surfaces.

TOYOTA ELECTRIC SKID CONTROL (ESC)



The GM ESV's design goal was to develop a vehicle with a familiar and pleasing mid-'70's configuration and the road feel of a typical American car. The GM car utilizes its larger body size for external crash protection. The interior design is similar to a present-day auto, with an assortment of restraint systems available.

PROPER RESTRAINT

Both safety cars utilize external shock-absorbing systems to lessen crash severity; but, according to ESV engineers, the real key to crash survival is proper passenger restraint. Many companies are trying to develop a workable passive-restraint system, but several representatives told DRIVER there is no system presently as reliable and effective as the properly utilized seat belt/shoulder harness combination. These safety experts recommended that everyone avail themselves of a level of crash protection approaching that of the proposed 1975 Federal Safety Standards by using seat belts and shoulder harnesses. For those who don't like restraint systems, the experts recommend getting used to them because passive restraints will be required by law in 1975.

SAFER PRODUCTION CAR

One of the popular Swedish companies also had it's ESV on display at the Auto Show. However, it did not differ significantly from their standard production car because many of the new safety features have already been incorporated into their standard cars. If you're interested in a potentially safe vehicle *before* the new Federal Standards go into effect, one of the Swedish cars might be just the thing.

HYDROGEN AND POPCORN

The second area of great concern for the future of the automotive industry was well represented at the show. Numerous pollution-control exhibits and low-emission experimental cars were displayed. One of the most unusual of these cars also had a very interesting safety system. A hydrogen-powered* Gremlin designed by students at the University of California Los Angeles (UCLA) featured a popcorn-filled, shock-absorbing bumper system.

1973 CARS

All '73 cars have the Federally required 5-mph, shock-absorbing bumpers. The crash-resistance level of bumpers will be increased to 10 mph for the '75 models. This is the only firmly established '75 Federal Safety Standard at this time.

The 50th International Auto Show had a lot to offer this year, but many people seemed most interested in what the auto manufacturers would have to offer in 1975 and -76. At this point, what the new Federal Standards will be, and what the auto industry will be doing to meet these standards, are both uncertain. But, if the '73 auto show is any indication, 1975 and -76 will be very good years for highway safety as well as the environment. ●

**DRIVER will provide more info on the use of hydrogen as a readily available clean-burning source of fuel for contemporary-design engines in a later issue.*

Carol Charles, queen of the Southern California International Auto Show, finds enough room on the impact-resistant bumper of the Volvo Experimental Safety Vehicle to take a sunbath.

AUTO SHOW

An emphasis on 1975 at the '73 auto show

Some of the most interesting cars on display were those designed for the Urban Vehicle Design Competition by college students. One of the most promising approaches to automotive emission control is UCLA's hydrogen-powered Gremlin. This car also has a unique safety system, including a popcorn-filled, shock-absorbing bumper system.

The Toyota experimental safety vehicle (ESV) was one of several such safety cars on display. This sporty, two-passenger car features a revolutionary skid-control system that prevents skidding on slippery roads and decreases braking distances on all surfaces.

All 1973 cars have bumpers designed to withstand 5-mph crashes. The 1975 Federal Safety Standards will call for bumpers capable of handling 10-mph crashes.

The General Motors ESV incorporates shock-absorbing body components with its relatively large size for crash protection. The body and interior designs are less unusual than those of the Toyota, which utilizes more radical forms of crash protection to compensate for its smaller body.

Star of the nostalgia show was the 1948 Tucker Torpedo. Some 25 years ahead of its time, and one of the world's first safety cars, it featured recessed control levers, padded interior, collapsible steering column, safty belts, and other innovations now considered as musts.

Jeep
MOBY DICK I
TOTAL
124
COMPETITION
LIMITED
GOODYEAR
Prepared by RIKKE JEEP & DAN LAGROU

4-WHEEL DRIVE HAZARD

Information received from Safety Office, LTTC, Lowry AFB CO

A Sergeant was driving a four-wheel-drive government vehicle on a straight-and-level highway, with the front wheels engaged in "Drive." The temperature was below freezing, and the road was covered with light layers of ice and snow.

The vehicle was traveling at a supposedly safe 35 mph when a tractor/trailer truck entered the roadway from an intersection some 150 feet ahead. The Sergeant released the accelerator and tapped the brake pedal intermittently.

The GMV immediately went into a right-hand skid and failed to respond to corrective steering. The vehicle skidded 150 feet and crossed the luckily untraveled oncoming lane, then went off the shoulder, struck a culvert headwall, and rolled over into the roadside ditch. Since the vehicle had been traveling only 35 mph (and all five military occupants were wearing their seat belts), only two suffered slight, first-aid-type injuries.

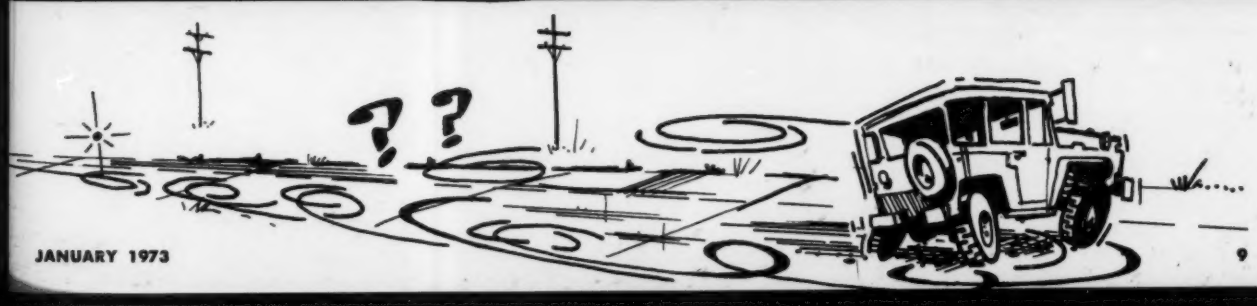
Why did the vehicle go into a skid, and why did it not respond to corrective steering? Well, it went into a skid because all four wheels suddenly quit rolling when the driver throttled the engine down and tapped the brakes.

"But," you might ask, "isn't that what the manual says to do—and isn't that what DRIVER advised in last month's 'Winter Is Here' feature?" Not really. . .we recommended the brake pumping and/or down-shifting when preparing to execute a full stop on a slick surface, after getting off the gas. But we hope no one construed that to mean we were advising a four-wheel-drive operator to take those actions on an icy road with the front wheels in "Drive."

Should you have occasion to operate such a vehicle with the front wheels engaged, suddenly releasing the gas pedal will cause the engine to brake the front wheels as well as the rear. The Sergeant did just that, and unknowingly added excessive braking action when he tapped his brake pedal. This robbed his tires of what little traction they had left—and no amount of corrective steering would put it back.

The same goes for high-speed driving on wet or dry pavement. If the front wheels of any vehicle lose their free-wheeling capability for any reason (such as hydroplaning or contacting melted tar, oil slicks, or loose gravel), you have no control.

The lesson to be learned here is to know your vehicle's capabilities—and don't have the front wheels of a four-wheel-drive vehicle engaged when you have no need for four-wheel-drive capabilities. At high speed, or on slippery roads at any speed, those capabilities will not only be useless, but could be hazardous to your (and your passengers') health. •



MOTOR SPORTS CLUB NEWS

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SAN VITO DEI NORMANNI AS, ITALY

Once again, combined civilian/military automotive club activities have acted as a strong force in cementing international friendships.

A member of the Southern Italy Motorsports Association (SIMA) made note of a sign advertising an Italian gymkhana, posted in a small cafe near the base. So, a small contingent of SIMA members traveled to Lecce to participate. One of them, Bruce Moore, drove his Fiat 850 to a third-place win and received a medallion for his efforts in a class of nearly 60 cars.

After the event, all of the American club members were invited to the awards banquet and dance held by the Italian club, Scuderia Piloti Salentini. New friendships were formed, and Mike Gilkerson, SIMA President, extended an invitation to a small group of Italian drivers to participate in the next SIMA-sponsored event.

The Italians responded overwhelmingly. Shortly afterward, more than 35 Italian drivers participated in a gymkhana held in the base Civil Engineering parking lot, and even brought their own gallery of fans.

The preceding Springnationals Gymkhana held in the Civil Engineering parking lot at San Vito AS was also sponsored by SIMA. The theme was promotion of driver interest, safety, and just plain fun.

The contest was divided into four classes, including one especially for the ladies. In winning the latter, Linda Gilkerson came within 4 seconds of the day's fastest time, and her husband, Mike, took Class III honors in a Ford Pinto with the third fastest time of the day. The afternoon's closest contest was between SSgts Phil Lawrence and Bill Stoddard, driving 911-Ts. Stoddard's Targa was second by just .05 of a second. Class II was won by Seaman Lynn Voss, driving a Fiat 124 Spider.

Bob Wieneke
Office of Information
6917th Security Group
San Vito Dei Normanni Air Station, Italy

Phil Lawrence wheels his Porsche 911-T around a turn in competition at San Vito Dei Normanni Air Station, Italy. Phil took first place in Class V (over 2000 cc). (USAF photo by Bob Wieneke)

F-I-R-E-BIRD—Mike Bashista guns his Pontiac Firebird 400 off the line during the Springnationals Gymkhana. (Photo courtesy SSgt George Banta)

NAS PENSACOLA, FLORIDA

Motorcycling can be a fun thing as a family affair, as has been demonstrated by the Hardcore Motorcycle Club of Pensacola, Florida. The club's membership is comprised of 40 Pensacola Naval Complex personnel and their dependents.

One of the club's more memorable motorcycle races was held on its quarter-mile scramble track at Whiting Field Naval Air Station. The event drew a field of 25 entries and a host of spectators. In addition to giving their moral support from the sidelines, many spectator-club members assisted the riders in performing last-minute repairs and tuning bike engines. Many families brought along picnic packets and turned the occasion into an old-fashioned outing.

Both trail and competition bikes were entered in three classes, with each class running three 10-lap heats. The race was run on a track softened by an early-morning rain, and was not without its share of spills and thrills. The riders gaged the hazards expertly, however, so injury and damage was limited to a few bruises and bent fenders. One rider pushed his machine across the finish line after several unsuccessful attempts to

Up, up and away! Well, almost. "Hardcore" rider goes over one of two jumps on club's Whiting Field NAS scramble track. Seems this fellow lost the protection of his glove in the excitement. (Photos by PHC Arnold Clemons, U.S. Navy.)

Man and Machine . . . in a test of skill and speed.

restart the engine, and was applauded loudly by both riders and spectators. He finished last, of course, but had the satisfaction of finishing the race. (See box for race results.)

In view of the alarming numbers of Navy personnel killed and injured in motorcycle-related accidents, many Naval Districts, ships, and shore stations have established riding classes. Members of the Hardcore Motorcycle Club have also developed such a course, and conduct monthly classes at NAS Whiting Field. Additionally, the club features organized street rides and trips for its members.

Hardcore Motorcycle Club President Gary Kelberer says "Safety," on and off the track, is the club's byword. The members *live* by it.

PHC Arnold Clemons
Naval Air Basic Training Command
NAS Pensacola, Florida

RACE RESULTS

0 to 100cc Class
1. **Jeff Day (dependent)**
2. **Gary Kelberer (VT-3)**
3. **Paul Cochran (VT-3)**

101 to 175cc Class
1. **Gary Stevens (VT-6)**
2. **Rebel Taylor (NAS Whiting)**
3. **Mike Roy (HT-8)**

Open Class
1. **Dave Truluck (VT-10)**
2. **Jerry Hoover (VT-5)**
3. **Gene Baker (NAS Whiting)**

TACHIKAWA AB, JAPAN

Driving awards were presented to 10 outstanding government vehicle operators following completion of the 1972 Fifth Air Force Vehicle Rodeo at Tachikawa AB, Japan.

The awards were presented by the Fifth Air Force Vice Commander during a banquet held in the Tachikawa NCO Open Mess. First- and Second-place winners were:

Sedan: (1st Place) Kohji Baba, 475th Trans Sq, Yokota AB, Japan; (2d Place) Sgt David W. Lepley, 51st AB Wg, Osan AB, Republic of Korea.

Pickup: (1st Place) TSgt Norbert J. Cheri, 824th Svc Sq, Kadena AB, Japan; (2d Place) Sgt David E. Shevey, 51st Trans Sq.

One-and-a-half-ton truck: (1st Place) Shozo Dohgaki, 475th Trans Sq; (2d Place) Sgt Allen L. Bockensted, 51st Trans Sq.

Twenty-nine-passenger bus: (1st Place) Sgt William F. Fortune, 824th Trans Sq; (2d Place) Kiyoshi Asano, 475th Trans Sq.

Truck tractor: (1st Place) A1C Jimmie E. Headrick, 475th Trans Sq; (2d Place) Sgt Arthur D. Goetz, 824th Trans Sq.

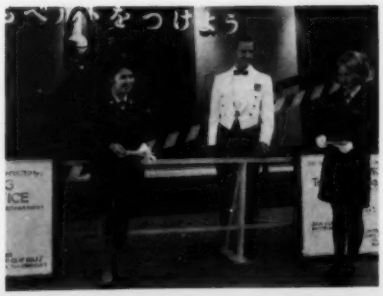
Competition in the five categories was run over a grueling course designed to test the total driving ability of all entrants.

Office of Information
Hq Fifth Air Force
Fuchu Air Station, Japan

In addition to the 475th Air Base Wing's participation in the Fifth Air Force's 1972 Vehicle Roadeo at Tachikawa [see 5AF release above], the 475th Wing furnished a locally fabricated "seat belt convincer" for display in the 19th Tokyo Motor Show Safety Building. The Wing furnished white-jacketed SSgt Bill Wilt of the Wing Safety Office, SSgt Bart Mayes of the Civil Engineering Office, and 26 comely volunteers from the 475th WAF Sq to assist with the display and demonstrations. Sgt Mayes operated the demonstrator, SSgt Wilt answered questions about the "convincer," and the WAFs smiled fetchingly, dispensed brochures, and answered questions concerning use of seat belts.

Sergeant Wilt also made plans for showing the convincing device at schools and in front of the BX on paydays.

Capt Bob Carruthers
475 ABW Office of Information
Yokota AB, Japan



Sergeants Jane Zapata and "Tony" Sebring, 475th WAF Squadron, get ready to greet a portion of the millions of visitors to the 19th Tokyo Motor Show. Staff Sergeant Bill Wilt of the Wing Safety Office answers questions about the ingenious "seat belt convincer" device built with "odds and ends" by 475th Transportation Sq employees.

(Photo by TSgt George Hunsley.)

CANNON AFB, NEW MEXICO

Drag racing enthusiasts at Cannon AFB, New Mexico, held their first meet of the 1972 season in early September. The drag racing/slalom competition had a large turnout, and the second event held in October was expected to be an even greater success—but the October competition runs were called off because of a heavy afternoon rainstorm.

The day was not totally ruined, since the competitors ran time trials on Runway 30, tuned their engines, and made final safety checks during mid-morning and early afternoon. Also, both spectators and drivers were treated to a thrilling exhibition by professional drag racer Randy Efros of Phoenix, Arizona, before the rain began to fall. Efros, owner and driver of a Top Fuel "Funny Car," made the appearance at Cannon as part of a tour of military installations and college campuses throughout the country. His dragster has a top speed of 220 mph, and is capable of traveling a quarter-mile in 6.8 seconds from the lights.

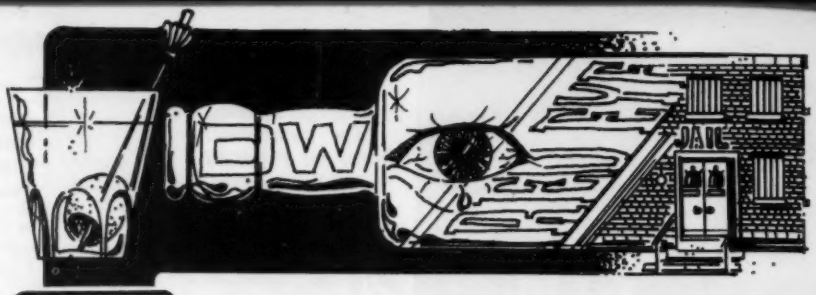
Efros managed to complete one exhibition run in a "mild" 9.26 seconds before the weather closed in. His "Funny Car," with the motifs: "AIR FORCE's 25th ANNIVERSARY" and "FIGHTER PILOTS DO IT BETTER," was a big hit with the racing fans at Cannon.

Cannon's motorsports program has been very successful, and there is growing interest in forming a Cannon Motorsports Club. 1st Lt Jim Humphrey and TSgt Ted Carignan, who were instrumental in the planning of the Cannon racing events, passed on the organizing committee's thanks to all who supported the races. Persons interested in future racing meets, or who would like to help in organizing a meet or with the formation of a Motorsports Club at Cannon may contact the Lt at Ext 3125, or the Sgt at 2926.

Office of Information
27th Tac Ftr Wg
Cannon AFB NM 88101

Ed Note: Contributors to "Club News" are again reminded to submit full name, rank (of military personnel), and job title of each person involved. We'll publish the feature each month, provided we receive enough letters and photos to fill at least one page.●

"DWI" doesn't mean driving only under the influence of alcohol



the LAW & the AUTOMOBILE

Being denied the use of a motor vehicle is a great inconvenience, but it pales into insignificance when compared with all of the troubles that could result from a "DWI" charge.

Such a charge means a motor vehicle operator is suspected of having driven while under the influence of *an intoxicant*, which is a criminal offense. Should a breath or blood test fail to indicate a legally intoxicating blood-alcohol level, the apprehending officer's testimony concerning an individual's actions before and after the arrest could result in a conviction. Also, other chemical tests and/or evidence found in the car or on the suspect's person could convince the judge or jury that injudicious use of one, or more, of several types of "intoxicants" was involved.

The inebriants could include such depressants or exhilerants as sedatives, antihistamines, bromides, "pep" or "stay-awake" pills, prescription or nonprescription narcotics and other drugs, fumes from chemicals found in certain glues, chemical aberrants such as LSD, and marijuana—to name but a few.

In some states a "DWI" first offense can result in a stiff fine *and* imprisonment, or both; and, even if the defendant lucks out with the judge on that score, some state vehicle departments are required to suspend the driver's license for specified periods.

In one state, *upon first conviction,* the license is suspended for not less than 60 days or more than 1 year. The fine may be not less than $300 or more than $1,000, and the jail sentence may be as long as 1 year—or the punishment may be all of the above. And, after three convictions within a year, the license is canceled.

Another state deals out $200 to $500 fines, or imprisonment for not less than 30 days nor more than 3 months, *or both, and* forfeiture of driving privileges for 2 years. A second offense can result in 3 months' imprisonment and loss of license for *at least 10 years.*

It must be remembered that the above penalties are levied for driving in an intoxicated condition. Other criminal laws cover being found drunk or drugged in an auto, even if the defendant was not driving; and even if not yet legally drunk or drugged, a person can be charged with using drugs or drinking *in* the vehicle—or just transporting unsealed alcoholic beverages or illegal drugs. Still other criminal laws cover negligent homicide, destruction of property, and other such violations while "under the influence."

Typical of the laws concerning a "DWI" in which bodily injury was caused is the one which suspends the defendant's license for a year. Even then it can't be reinstated until the driver files proof of his financial ability to respond to damages. The latter calls for either a very high-cost insurance policy or a five-figure bank account. And subsequent convictions can result in *permanent* license suspension.

These are but a few of the consequences faced by both civilian and military personnel risking apprehension—not to mention possible civil suits. . .or a possible, personal one-way ride to a hospital.

MILITARY COMPLICATIONS

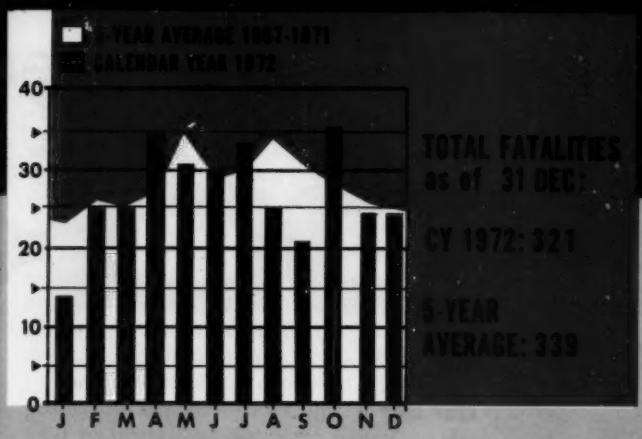
You might think these things would be deterrent enough, but they're not; the figures of approximately 3 million injured and 56,000 killed each year on our roads attest to that. So, our military, with unique manpower procurement and retention problems, had to provide supplementary stop-gap measures. One such measure is contained in Joint Services Regulation 125-14, which provides for reporting of pertinent traffic violations between civilian and military authorities—and for such protective/corrective actions as scheduling additional training sessions and suspension or revocation of on-base driving privileges.

DOUBLE JEOPARDY?

Military use of the "point system" in cooperation with many states has caused some uniformed defendants to cry "Double Jeopardy!" However, since the military *does not* take *punitive* action against an individual who has been convicted of a civil driving violation, such a complaint cannot be considered valid. (See AFM 111-1.)

Let's take a look at the facts and reasoning behind this practice. Traffic safety on a military installation is a primary concern of the commander. And, while his jurisdiction off-base is greatly limited, the commander has the definite responsibility of looking after the welfare of his troops wherever they may be; also, of taking any action within his authority to prevent the loss of their services to the command mission. These losses occur when military personnel are killed, injured, or jailed. And the commander

continued on page 25



A monthly recap of selected accidents—presented solely in the hope some will benefit from the unfortunate experiences of others

HOW GOES IT?

ALCOHOL AND AMPHETAMINES

Rank: Sgt Age: 20
Type vehicle: 1962 Taunus, 2-door

The Sgt and an Amn consumed several drinks and amphetamines before dinner, and had several more drinks after the meal. Then they motored to a night club and a discotheque in nearby towns.

On the return trip the Amn went to sleep in the back seat. The vehicle entered a sharp left-hand turn at high speed on wet asphalt pavement, left the road, and impacted a tree. The Sgt was killed and the sleeping Amn seriously injured. Seat belts were not used.

Probable causes:
Mixing alcohol, drugs, and driving; excessive speed on curve of wet road.

ALCOHOL AND CARBON MONOXIDE

Rank: SSgt Age: 31
Type vehicle: Family car

The SSgt was found dead in the front seat of his car, parked in his locked garage. The ignition switch and lights were still on, but the engine had stalled.

Inspection of the vehicle revealed numerous exhaust system leaks and deficiencies. Autopsy results showed a fatal level of carbon monoxide and a high level of alcohol in his blood.

Probable cause:
Operating an internal combustion engine in a confined area.

Probable contributing factor:
Consumption of alcohol.

ELECTROCUTION

Rank: Capt Age: 26
Type vehicle: Pickup truck

The Captain was electrocuted while attempting to drill a hole in the I-beam of the frame of a pickup truck chassis. He was not aware that the 10-year-old drill he was using was defective.

Investigation revealed someone had replaced the original three-prong plug with a two-prong plug and cut off the mechanical grounding wire at the plug. A short occurred in the handle of the drill as a result of deteriorated grounding wire insulation. This grounding wire conducted current from the "hot" black lead to the metal handle.

Probable cause:
Use of defective hand-drill.

CYCLE vs AUTO

Rank: Sgt/Sgt Ages: 21/21
Type vehicles: 1969 Honda Motorcycle, 350cc/1970 Torino GT

It was early morning when a Sgt stopped his car at a boulevard stop sign, then proceeded north across the intersection. Another Sgt was riding his motorcycle east at 70-75 mph in a 65-mph zone on the boulevard.

The cycle impacted the Ford's rear side, and the rider was thrown into and over the car. He was wearing a helmet, but suffered fatal body injuries.

Probable cause:
Failure of car driver to yield right-of-way.

Possible contributing factors:
Excessive speed of cyclist; cyclist's dark green clothing, helmet, and bike.

FATAL PARTY

Rank: Amn Age: 19
Type vehicle: 1967 Chevrolet Conv

The Amn was one of six passengers in a POV operated by a non-USAF civilian. All had been partying until 0525, and the driver had been drinking.

It was still dark, and the road was wet. The vehicle's tires were worn smooth, and the driver lost control while exceeding the speed limit. The convertible impacted a utility pole and three trees.

Seat belts were installed for use by four people, but none of the seven had buckled in. The driver was injured, but lived to face involuntary manslaughter charges—since the Amn and one of the civilian passengers were killed. The other four suffered slight to serious injuries.

Probable causes:
Alcohol and speed.

Probable contributory factors:
Slick tires, wet road, and fatigue.

SHORT, SHORT STORY

Rank: Amn Age: 19
Type vehicle: 1970 Plymouth 2-door

The Amn drove his Roadrunner into the path of an oncoming train at night, and was killed instantly.

Probable cause:
Inattention.

Probable contributory factors:
Distraction by sound of tape deck in closed vehicle.

U.S. SAILORS "SHOOK UP" BY LONDON

(near right)
London Police Sergeant Bert Oxford points to errors made by Navy's Radioman Second Class Tommy Scott on the exhibit's question-and-answer display. The display tests the participant's knowledge of British driving laws and highway signs.

(far right)
Navy Yeoman Second Class John M. Maroney tries his luck at the vision test. The test, supervised by London Police Sergeant Arthur Garrett, utilizes road signs instead of the usual letters.

ON POLICE EXHIBIT

Submitted by Public Affairs Office, United States Naval Forces, Europe

"Statistics shake people up," explained British Policeman Bert Oxford as he demonstrated to American sailors the time required for a person to react and apply the brakes of a motorcycle.

"When you tell people that every 90 seconds there is a motor accident in Great Britain, and that on the average there are 20 fatalities a day which are connected to motor accidents, they open their eyes."

The bearded officer explained that people do not get "shook up" over total numbers; but when the figures are broken down into days and seconds, they start thinking. This is just what he wants to accomplish.

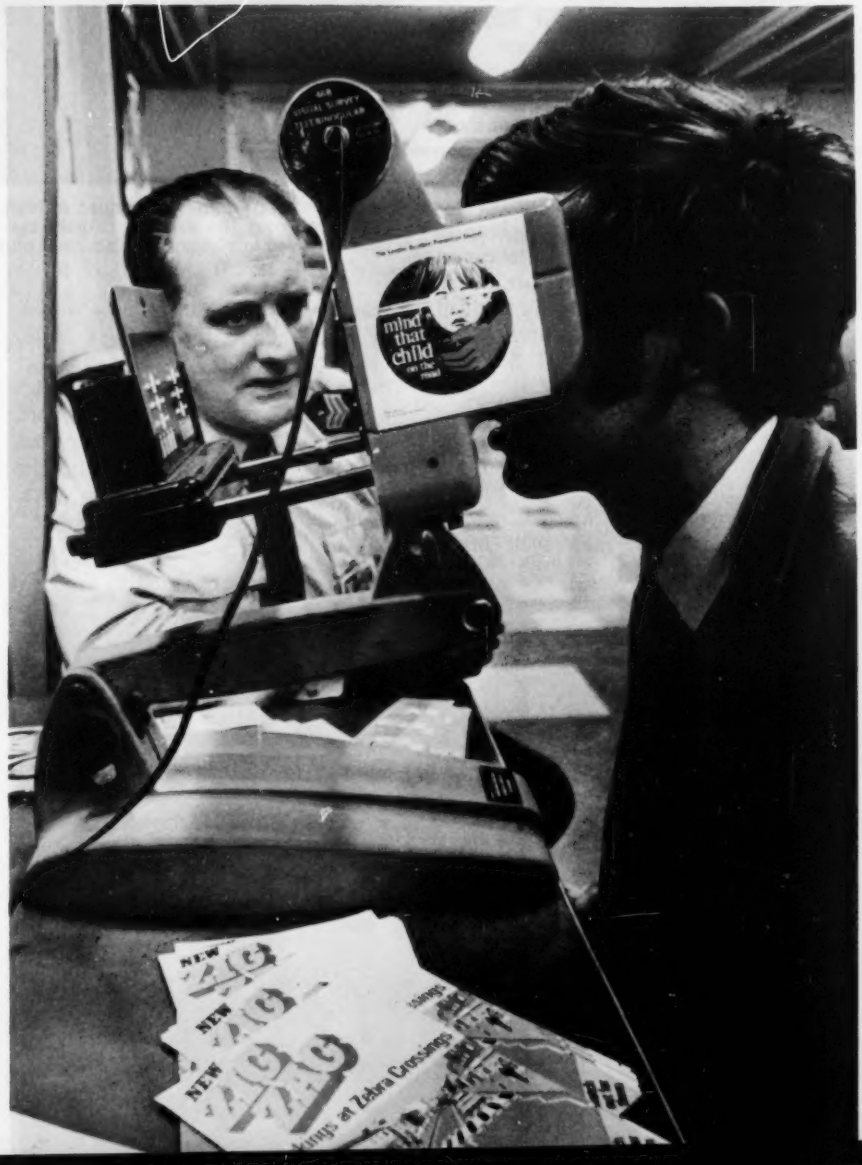
Sergeant Oxford's job is to inform the public of the dangers and responsibilities on Britain's highways. Oxford is in charge of the London Metropolitan Police Department's Road Craft Exhibition Unit. He has designed and built most of the exhibits used to make people aware of highway safety and to demonstrate good road behavior.

The Sergeant was invited by the U.S. Naval Communications Unit to display a portion of his exhibit during a week in October in the London headquarters lobby of the Commander in Chief, U.S. Naval Forces, Europe.

The British Police Department has also been conducting safety lectures for American motorcycle operators. "It's important for the sailors to learn all the ins and outs of British road safety," Oxford said, "as most of our laws differ from those in the States, including the obvious one of driving on the left."

Radioman First Class Raymond C. Knieriem, Training Petty Officer and

continued



U.S. SAILORS "SHOOK UP" BY LONDON POLICE EXHIBIT

career counselor for the Navy communications unit, said, "The motor safety program is a supplement to our regular general military training program. Our command has had its fair share of motorcycle accidents. For this reason, we have made it mandatory for all motorcycle operators to attend the lectures given by London Police Sergeant Arthur Garratt of the local area Traffic Division. In the past, Sergeant Garratt has been hitting on general subjects, but now he'll be getting down to brass tacks."

"Many people think they know all the rules and laws concerning motoring," said Police Sergeant Oxford. "When they participate in some of the exhibit's tests, they often find out otherwise. It's only natural that people forget some rules when they don't use them every day. But remembering these rules could prevent them from getting hurt or killed on the roads."

The British policeman further explained that most people looking at the exhibit are reluctant to take part or test themselves if there are others milling about, but that many of them return when the exhibit area is uncrowded. "Some people," he said, "will not participate because they think that if they fail they will be reported, especially if they fail the eye test. But this is not the purpose of the exhibit."

According to the Sergeant, almost everyone fails the motorcycle brake reaction test. It begins when a would-be rider mounts the exhibit's 500cc motorcycle situated in front of a rear projection screen. The cycle "travels" a simulated speed of 30 mph. Oxford then pushes a concealed button that imposes a traffic obstruction on the street scene in front of the bike. "Almost everyone 'hits' the object," he said.

Lieutenant (jg) Walter E. Wagner (foreground) and Radioman Second Class Tommy Scott look over the exhibit's motorcycle helmet display. Each helmet displayed has been involved in a motorcycle accident on Britain's highways.

The Police Sergeant tells the rider how far he traveled before applying the brakes. Then he explains what distance it would take to stop a motorcycle in a real situation, if the bike had good tires and was running on a good road surface.

"It makes people think of these dangers," he said, "and little things like this are remembered." •

Police Sergeant Oxford explains the time and distance required to apply brakes on the display motorcycle after an obstruction appears on the screen.

Photos by PH1 Bob Woods

DRIVER

HOW TO READ AN OIL CAN

Reprinted courtesy Automobile Club of Southern California

In this age when the consumer is king, there's a move afoot to uncomplicate the markings on packages. Most milk cartons, for example, now show the date when they should be removed from the supermarket shelves, in clear letters and numerals rather than in code.

But when you buy a quart of oil at your local service station the string of letters embossed on the top of the can offer you no such convenience. It's not that anyone is trying to hide the facts from you. But—like almost everything else—the system of grading motor oils has become so complex, the average user may feel the need of a Jack Armstrong decoder ring to figure out what all those initials stand for.

Of course, you may be among those who just say, "Put in a quart," and let it go at that. But, in case you happen to be a more careful buyer, here—in one easy lesson—are the facts about the new motor-oil coding system which is presently going into effect:

To begin with, two parts of the coding have remained unchanged. The SAE at the front of the string of letters still stands for Society of Automotive Engineers. And the numerals 10, 20, 30, or 40 still indicate the viscosity or flow characteristics of the motor oil. Or those numerals may be 10W40 to indicate a multipurpose oil covering a wide viscosity range, with the W denoting an oil especially adapted to winter use.

But, in addition to this SAE viscosity rating, motor oils have also had an American Petroleum Institute classification (API) indicating the *type* of service each is suitable for. In recent years these various classifications have been marked ML for Motor Light, MM for Motor Medium, and MS for Motor Severe. To meet car manufacturers' specifications all 1964 or later model American cars required motor oil of the MS classification.

At present much of the motor oil on the market is still marked with these designations; but as the newer product is distributed the new system will take over, and all motor oils will be marked SA, SB, SC, SD, or SE.

Fortunately, where your car is concerned, you can forget classifications SA through SC. They're intended for lawn mower, appliance, or other light-duty use. The important thing to remember is that all cars through 1971 models formerly requiring MS type oil will now require Service Deluxe (SD) oil.

But to meet future requirements of the auto manufacturers a new super Service Extreme oil (SE), with still greater heat-resistant qualities, is now coming onto the market.

Could *you* benefit by using the new SE oil in your present car?

The odds are it won't be necessary. BUT, if you have a high-performance engine and intend to travel long distances in hot weather via freeway or Interstate; if you have automatic transmission, air conditioning and a boat or trailer to tow—and especially if you have a combination of several of these factors—that new SE motor oil could prove to be the best engine protection your money can buy. ●

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Author Kaysing continues his knowledgeable dissertation on

SAFETY IN THE CITY

PART VII

INTELLIGENT MOTORCYCLING

by
BILL KAYSING

Adapted from CYCLE WORLD. Permission from Bill Kaysing and the Parkhurst Publishing Co gratefully acknowledged

As mentioned in the preceding installment, the "Three A's" (Attention, Anticipation, and Appropriate Action) are necessary to a rider's survival while contending with city traffic; and this holds true even when the traffic is light.

THE THREE "A's" AT WORK

The absence of a large number of vehicles does not assure anyone's safety. After all, it takes only two objects trying to occupy the same space at the same time to create work for the ambulance drivers. But many riders take it for granted that when the city traffic is light, streets ahead will be clear and everyone will behave in a predictable manner.

I recall the first motorcycle-car accident I had ever witnessed. It was a lazy, warm summer day, and the street was empty of all but two vehicles—a model A and big JD model Harley. They were proceeding down the street at perhaps 20 mph, side-by-side, with the cycle on the right. Suddenly, without warning, the A turned right into a driveway, "shutting the door" on the hapless JD. The rider tried to climb the curb, but his machine spilled him headfirst onto the unyielding curbstone.

It was a bloody and painful but, fortunately, not fatal accident—one which left a lasting impression on me. The impression was that accidents can occur at any time and in the most unexpected places.

The heavily congested city street, however, presents a greater variety of situations than are present in the more lightly traveled regions. There are street cars, trucks, carts, taxis, buses, pedestrians, and automobiles aplenty. A cyclist must really be alert to survive in this man-made chaos. What appears to be a clear passage up ahead may be full of all kinds of solid and unresisting objects in a matter of seconds. Let's consider a few of the more common city-traffic problems.

THE SWINGING DOORS

Thoughtless people are continually opening their car doors without checking to see what's coming. So, *always* ride beyond the swinging radiuses of a parked car's doors. If that is not possible, check to see if there is an occupant in the front or rear seat. If so, take appropriate action: stop or, when safe, move left out of range of the hinged widow-makers.

THE GAP THAT CLOSED

Many riders have quit cycles for daisy pushing just by assuming the narrow gap between long rows of cars will stay open indefinitely. Even at a modest speed, it is most disconcerting to come upon a slot smaller than the span of your bars. The space between rows of cars can sometimes be used in an emergency to prevent rear-ending someone, but should not be used as a regular route of travel.

RIGHT- AND LEFT-TURNERS

The cycle rider who expects to make his 3-score-and-10 will never pass a car on the right on a two-lane divided street. It's a giant temptation at times, since a cycle can shoot

continued

through a small space in a short time. However, this small space has a tendency to be filled unexpectedly with car doors, pull-outs from the curb, people stepping out from between parked cars, as well as dogs, children, and other impediments.

When you approach an intersection, and there is a possibility that someone might turn in front of you, let him go first; it is difficult to argue right-of-way with your head stuck in his sealed-beam. For a cyclist making a left turn, it is insurance against being rear-ended to simply move over to the extreme left of the roadway and let the cars behind you pass. When turning right, stay close to the curb to avoid being clipped by through traffic.

THE CAUTION LIGHT

Be extremely cautious when approaching intersections in big cities. When signals are either red or green, there is a marginal orderliness to vehicle movement. However, when that orange (or yellow) light goes on, the intersection becomes a no-man's land which the intelligent rider diligently avoids. Here, again, the small, hard-to-see two-wheeler becomes the unseen "target." There are many signal-jumpers driving "hot" dragster-type cars, who are just not looking for a small object coming through on the orange light.

And remember, many drivers have "tunnel" vision and cannot see well to the sides. Other people drink or are otherwise preoccupied. Therefore, to keep your front wheel round, prepare to stop when the orange light comes on. Expecting *everyone* to see you *every time* is simply asking too much.

INTERESTING SIGHTS

Big cities, small cities, and beach resorts are full of pretty girls. If you expect to meet any of them, do your sightseeing as a passenger. It's fine to have an attentive eye, but save it for the 8-ton brewery truck backing out of the driveway. If there is something interesting to see, pull up and stop safely at the curbing.

SLOW MONSTERS AND FAST CYCLES

Cyclists who also pursue water sports know that sailboats have the right-of-way over large motor-powered vessels. And, notwithstanding the right-of-way, the sailboat pilot realizes that it is sensible to stay clear of a large ship with its capacity for quick turns and fast stops sharply limited.

The same holds true for the motorcyclist with respect to trucks, buses, trains, streetcars, and other large and clumsy vehicles. It is hard for their drivers to see or hear you; and they are hard-pressed to avoid hitting anything, once they are on course and at speed.

The distance factor between you and anything movable (or immovable) is important. Make it a practice to have plenty of room to maneuver and stop if necessary. If you find yourself in the center of a congested convoy of vehicles, speed up or slow down; either way, you'll get that feeling of freedom and elbow room.

CITY PASSING

If you *must* pass in heavy traffic, do it as quickly as possible. Hanging out in the extreme left lane with cars slicing by an arm's length away is just not good. This is an instance where a powerful motorcycle is a definite advantage. With plenty of ponies under the tank a rider can come up behind the car to be passed, downshift, and then pass in a few seconds and return to the safety of the right-hand lane.

NIGHT RIDING

When that evening sun goes down, slow down and be even more alert. The visibility of the average cycle (especially if painted a dark color) is much poorer at night. Furthermore, most drivers are not looking for a single, tiny taillight. So the danger of being hit from the rear is sharply increased at night. Keep to the right at signals, and maintain a sharp lookout.

Wearing light-colored clothing or a jacket will help you to be seen. Also, don't yield to the temptation to paint your helmet any color but white. . .except perhaps another high-visibility color.* Keep your windshield (if you have one) extra clean at night, and be sure your goggles are clean and unscratched. You will need every bit of light available.

WEATHER IN THE CITY

Adverse weather, plus city traffic, constitutes a greater menace to cycles than to the four-wheeled clan. Riding in rain, fog, snow, sleet, hail, and high winds should be avoided if at all possible, especially in heavy traffic. All of the normal traffic hazards are compounded for everyone by decreased visibility and lack of friction between the road surface and tires.

A film of oil accumulates on the streets during dry weather. When dampened by fog, mist, or rain, this oil is emulsified and becomes very slippery. So allow extra distance for braking. . .and don't try to take those corners at the usual speed.

If you've ridden your bike without goggles in a rainstorm, you'll recall the stinging sensation that felt like sand in your eyes. But with them, it's much like riding through a tremendous waterfall. So? Just stop somewhere and have a cup of coffee until it clears up.

Extremely cold weather is also detrimental to safety, since it slows your reflexes. It also often adversely affects rider caution. Some cyclists will respond to a natural desire to reach a warmer place with greater speed.

So, you see, cycle safety in the city involves many considerations. Remember the three A's—and not just when traffic is heavy. Enjoy yourself. Relax, keep cool, and maintain the serene outlook of a capable rider in top physical and mental condition, aboard a sound motorcycle; one who knows what to expect and what to do at all times. ●

(Editor's note: In our next issue, Bill Kaysing discusses "Safety in the Country.")

**Check with your dealer before you paint your helmet any color. Some paints will dissolve the shell material.*

WHAT YOU SHOULD DO...

In case of an accident

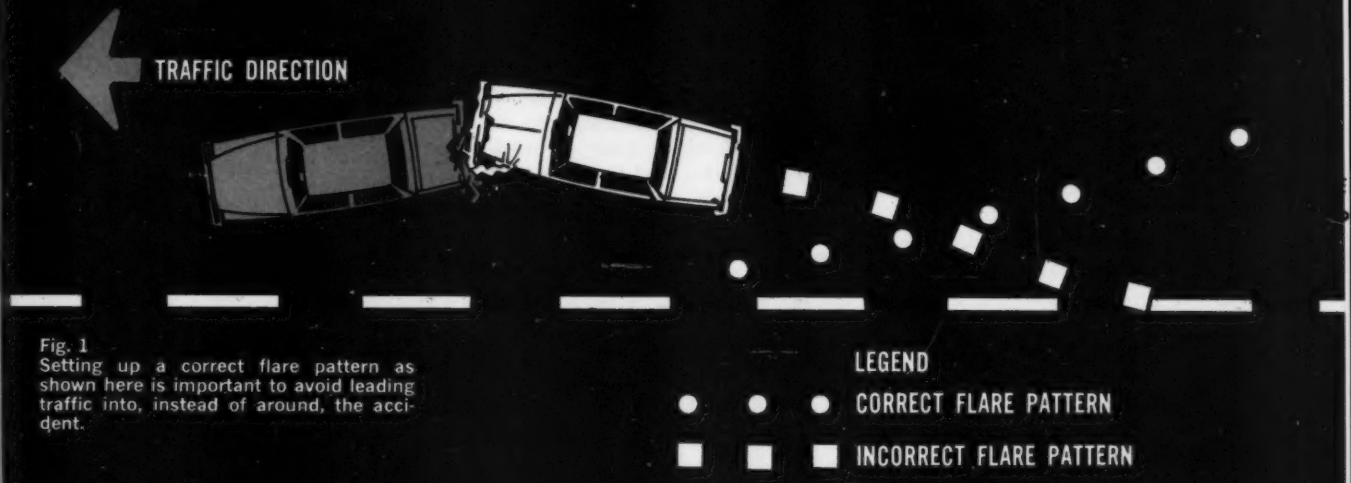

Fig. 1
Setting up a correct flare pattern as shown here is important to avoid leading traffic into, instead of around, the accident.

1. Stop . . . do not leave the scene of the accident (see 3, below). Check immediately for any injuries. Render whatever aid is reasonably possible to injured persons . . . but do not move them unless absolutely necessary. Extinguish any fire. If fire is raging beyond control, move injured persons carefully away from danger of fire or explosion, clear of traffic.

2. Direct traffic around the accident. Set out flares or reflectors (see Fig. 1). Vehicle emergency lights, if operable, should be flashing.

3. Try to get someone else to call the police. If you are in an isolated place, you may leave the scene of the accident to call the police and arrange for an ambulance, but first leave your name and address in a conspicuous place, and return immediately.

4. If injuries and damage are of a minor nature . . . remove as much of the obstruction as is possible from the traffic lanes.

5. Get the names and addresses of all persons involved, including passengers. Get the driver's license number of each driver involved.

6. Do not discuss the circumstances of the accident at the scene with anyone but the police.

7. Get the names and addresses of at least two witnesses, if possible.

8. Diagram the accident, showing all involved cars.

9. Check with police or the Department of Motor Vehicles to find out if an immediate written report has to be filed.

10. Report the accident to your insurance company.

THE BACK-YARD

DRIVER kicks off an auto maintenance series designed to help the novice working at home, as well as to provide a few reminders for the experienced hobby-shop mechanic

DRIVER has always recommended using the base hobby shop for auto maintenance and repairs. We still do. But, we know that many people who live miles from their assigned bases find it inconvenient to drive to the hobby shop to do minor auto work.

A lot of "not-so-mechanical" people prefer working at home, so they can take their time with minor maintenance—and learn as they go. Others would simply rather spend their car-repair weekends at home, and don't mind investing in the tools and equipment required for back-yard auto work. These are the people this feature is directed to, although it is designed to aid the hobby-shop mechanic as well as the back-yard variety.

If you plan to be involved with major repairs, we urge you to use the hobby shop, where the proper tools and assistance are available. But, many regular maintenance and repair jobs such as oil change and lube, tuneup, brake adjustment, and shock absorber replacement can be done safely and efficiently at home.

GET INTO IT

If you're one of those "not-so-mechanical" people, this is the perfect time to get into doing your own auto work. Most car maintenance is not difficult, and requires only a little knowledge and a modest investment in the essential equipment. You can begin with small jobs in the convenience of your own driveway. You'll have the satisfaction of doing the work and saving a considerable amount of money. Before long, you'll probably be doing all your auto repairs.

The back-yard mechanic's most common mistake, however, is getting into a job without the necessary tools, parts, and know-how. We'll get into this more when we discuss specific jobs in future issues. For the time being, you should establish a suitable working area if you want to be a safe and efficient back-yard mechanic.

THE HOME WORK AREA

A carport or enclosed garage is ideal, but even a paved drive provides a satisfactory place to work. Working on the bare ground is generally not desirable, but you can use cardboard sheets or a tarp as a clean working surface on level ground.

Adequate lighting and a workbench are two essentials of a proper work area. A UL-approved trouble light (available for under $2), along with normal daylight or garage lights, usually provides sufficient lighting for most jobs. A clean table or workbench should be used for laying out service manuals and parts. A wide board placed on concrete blocks easily substitutes as a workbench.

SAFETY STANDS ESSENTIAL

Of the utmost importance to your home work area is a set of good-quality safety stands or ramps. Top-quality jack stands are surprisingly inexpensive when purchased on sale from a discount or parts house, and will easily pay for themselves the first couple of times they are used. The ramps are a little safer and easier to use, but initially more expensive.

Either ramps or stands are absolutely mandatory whenever a car is raised off its wheels. You should *never* get under a car that is supported by a bumper jack alone. Jacks are strictly for emergency use, and cars frequently slip off a conventional jack. Many people are killed or injured each year because they failed to use safety stands. And don't forget to keep a couple of bricks or heavy wooden blocks handy to use as wheel chocks.

One final item you might add to your home workshop is a liedown-creeper. Creepers (a horizontal board on casters or swivel wheels) provide a comfortable and easy way to work under a car, and are available for less than $8.

When you've established you're working area, you'll need something to work with. Tools are a mechanic's best friends, and a basic set is all that's required for most back-yard work.

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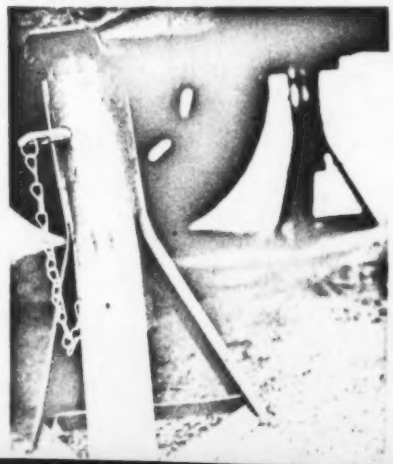
Safety stands are an essential feature of a well-equipped home work area. They are very reasonably priced, and will pay for themselves the first couple of times they are used. Stands are mandatory whenever a car is raised off its wheels. Many people have been killed or seriously injured while working under a car supported with only conventional jacks.



BASIC TOOLS

Many of you may already have most of the tools you'll need for routine mechanical work. For those new to the self auto-repair business, an adequate tool kit should begin with a set of open-end or combination wrenches. Combination wrenches, those with an open-end fitting at one end and a box-end fitting at the other, are the most versatile.

A set of ½-inch-drive socket wrenches, and possibly some smaller sockets in the ¼- or ⅜-inch drive size should suffice. To these basic wrenches, you can add a medium-sized crescent wrench. Assorted types and sizes of screwdrivers are essential, as are a pair of regular and needle-nose pliers. Round off your tool kit with a pair of vise grips, a feeler gage, a spark plug wrench, a gapping tool, and a 12-volt test lamp (see picture below).

Many popular department and discount stores often feature complete tool kits in the $25 to $50 price bracket. These stores also have frequent sales on wrench sets and individual tools you may need. While you're shopping, you might pick up a grease-gun (available for less than $5); then you can do a complete oil change and lube. This is the most common maintenance item, and probably one of the first things you'll want to do at home. For a complete rundown on basic hand tools, see Part 7, "You, the Mechanic!" (Sep '72 DRIVER).

A good working area and basic tool set will facilitate most regular car maintenance jobs, but some common jobs require special tools or equipment. We'll discuss these specific items in a future installment. Whether you want to borrow or purchase these items, or go to the hobby shop, when performing these special jobs is up to you. Many of the important gages and test-equipment items required are available for only a few dollars; you may want to add these to your home workshop. By purchasing items as you need them, you can build a very complete car tune-up and repair center right at home.

When you've accumulated the basics we've mentioned—you'll be set

to start maintenance and repair jobs at home. We'll begin the series next month with some simpler jobs and progress into more complicated tasks. In the meantime, why not ease into the game by giving your car a thorough check-up?

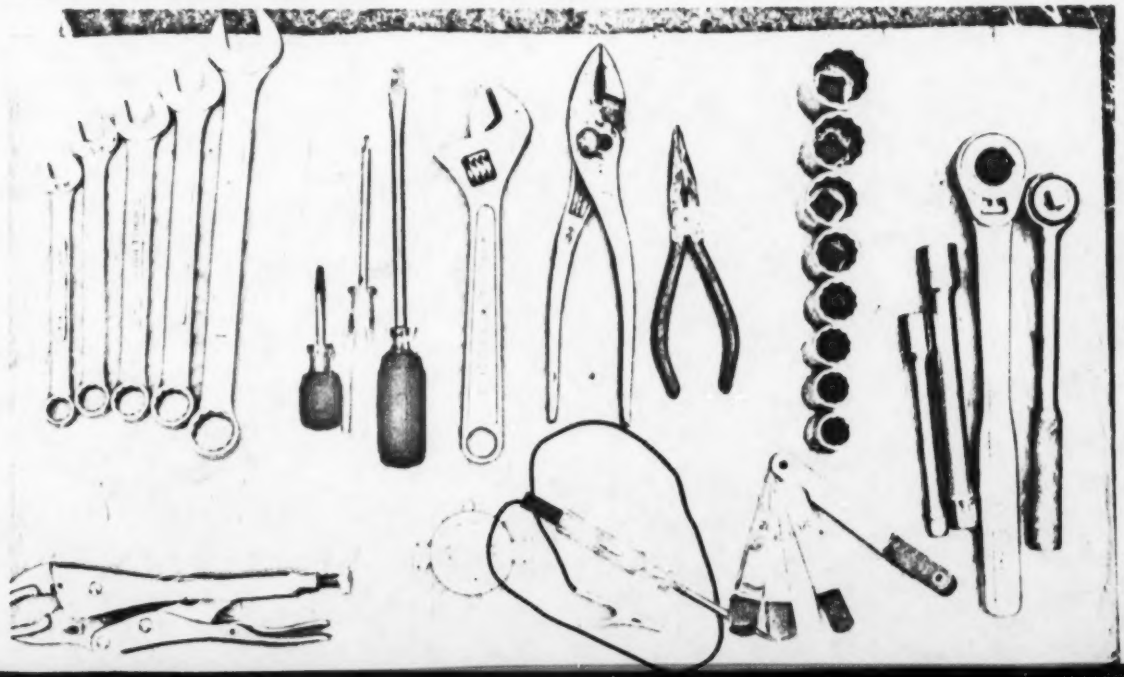
The following suggestions should help every week-end mechanic save time, money, and frustration; whether he be a novice or master—no matter where he is working.

• One of the best means of saving money is purchasing commonly re-

continued

MECHANIC

A basic set of tools is all that's required for most back-yard work.



placed parts before you need them. This will allow you to get such items as tuneup kit, air filter, and fan belt when they are on special. This will save running around trying to get an essential item in an emergency. You also won't be faced with paying an inflated price at the first or only shop

that stocks a badly needed part.

• Get a shop manual—and use it. Shop manuals save time and prevent frustrating mistakes, give specifications, and tell what special tools or procedures are required for a certain job. A manual is absolutely essential for anything more than basic maintenance. Your car dealer or your hobby shop or parts house attendant should be able to tell you where to get a shop manual.

• When you start a job, keep a complete record of how everything comes apart. Sketches or polaroid shots

should be made of complicated disassemblies. Be especially cautious of small springs, screws, and adjustment bolts—mark on the sketch exactly how these integral parts fit.

• Keep a fully assembled model for reference if possible. For instance, if you're doing a brake job, do one wheel at a time; then you'll always have a model to check when reassembling.

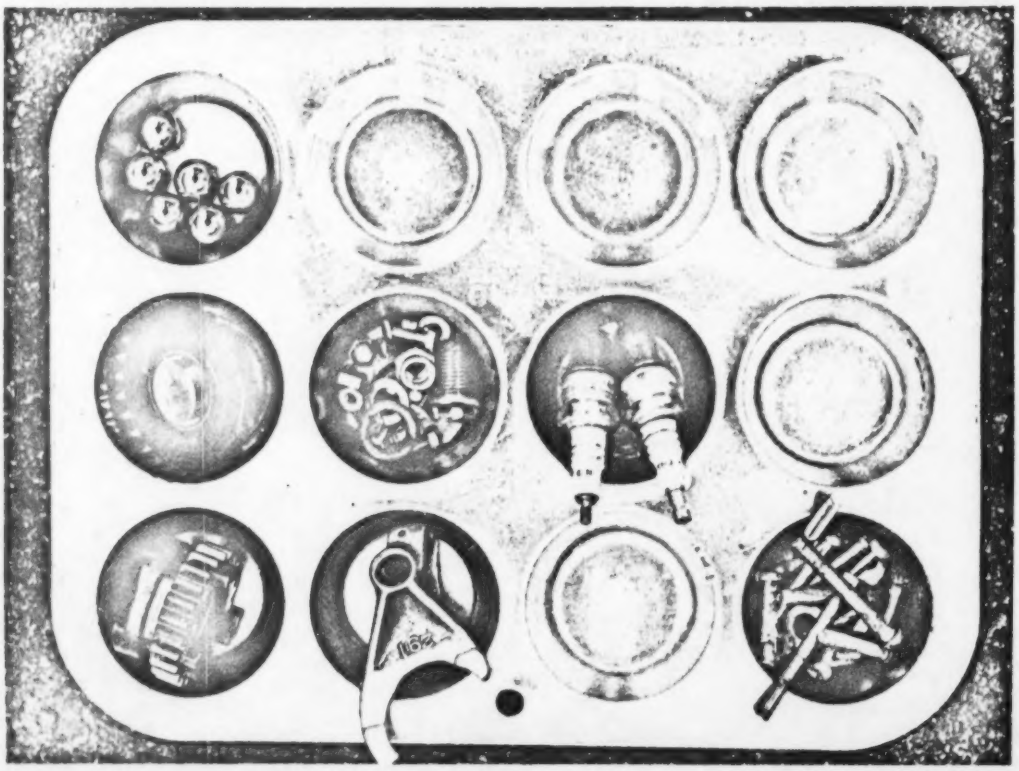
• Keep removed parts organized. Parts which must be replaced in the same position from which they were removed should be tagged and placed on a rack or in a box. Nuts, bolts, and smaller parts can be organized in a TV-dinner tray, muffin pan, or other such containers. Every part, including nuts and bolts, should be marked to indicate its location. This will save a lot of time by precluding the common problem of digging nuts and bolts out of a box and wondering which ones go where.

• Tag all electrical connections and wires to be removed. Also, when removing a linkage or adjusting rod nut, measure the length of exposed thread before removing the nut. When reassembling the piece, you'll know exactly how to adjust the nut.

• Allow yourself plenty of time when beginning a job. Have all the required parts and tools ready. If the job has an uncertain parts requirement, be sure you will have plenty of time to get the needed parts, and that a shop stocking what you need will be open.

• Unless you're an expert, don't try to rebuild important components. The cost of a professionally rebuilt part, or even a new one, is often not much more than the price of a rebuild kit.

• Most importantly, know what work to have done by an expert. Machine work, muffler replacement, tire repairs, and emission-control maintenance, among other specialized jobs can usually be done more efficiently by shop or mechanic with special equipment. The small amount of money you save on these jobs may not warrant your time or trouble. •



Organization of removed parts is the best way to save time and trouble. Large parts should be labeled, and sketches made of how and where they fit. Nuts, bolts, and small parts can be organized in a TV-dinner tray, muffin pan, or other compartmented container. Another good idea is keeping removed components in sequence of removal when disassembling a large part.

continued from page 5

DRIVING IN TIDEWATER, VIRGINIA

As soon as you case your new surroundings, whether it be Langley, Norfolk, or one of the numerous other installations nearby, you might want to head out on some Tidewater field trips.

HISTORY AND BEACHES GALORE

Almost everyone will tell you the best part of drawing an assignment to Tidewater, Virginia, is the area itself. Few, if any, areas of the country can match it for beauty, historic interest, and recreational abundance. You should start investigating this never-ending source for afternoon and weekend excursions immediately. From the Norfolk-Hampton vicinity, you have Interstate access to beautiful mountain country less than 5 hours to the west. Washington DC and New York are an easy drive to the north, and sunny beaches stretch for miles to the south.

The first thing you'll want to do, however, is take the Hampton-Newport News and Norfolk driving tours. Distinctive highway signs guide you through these historic cities, and will give you a good introduction to Tidewater driving. After making these tours, you should be a full-fledged Tidewater driver. Trips to such rural attractions as Jamestown and Williamsburg, and the historic battlefield at Yorktown, via I-64 and the Colonial Parkway, should be relaxing in contrast to the somewhat hectic Tidewater city driving.

After investigating the Tidewater area thoroughly, you can start exploring the wealth of places and sights within an easy day's drive. See the Tidewater driving chart opposite for a list of some of these popular areas.

There are a few more things you'll want to keep in mind before heading out on any Tidewater trips. Flooding on the bases has been mentioned, but heavy rains are likely to produce flooding anywhere near the coast. Snow can be a driving hazard in this area—luckily an infrequent one. When the white stuff falls, accidents immediately jump 300 percent. If you're used to driving in snow—remember, nobody else is.

Another dangerous practice you're likely to find in certain areas is a lack of turn-signal usage. Many native drivers never signal before turns or lane changes—if they do, they automatically assume they have the right-of-way.

One final traffic hazard is the unsure driver. With so many tourists in this area, streets and highways are always packed with motorists who aren't quite sure where they are going. Be alert for these drivers, and don't become one yourself. Always plan your route carefully, and have a satisfying and rewarding tour or vacation in the Virginia Tidewater area. •

Approximate Driving Time From Hampton-Norfolk

Place	Hours
Yorktown, Va	1
Williamsburg, Va	1½
Jamestown, Va	1½
Richmond, Va	2
Kitty Hawk, NC	2½
Washington, DC	4½
Annapolis, Md	4½
Gettsyburg, Pa	5½
Baltimore, Md	5½
Skyline Drive (Blue Ridge Mountains)	5
Philadelphia, Pa	6
Smoky Mountain National Park	7
New York, NY	8

Tidewater travels are the best part of an assignment in this area. Architecture of the historic and beautiful College of William and Mary is in perfect harmony with its surroundings in Williamsburg.

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The Law and the Automobile

knows there is a definite relationship between traffic violations and driving accidents; that repeat violators are more prone to have accidents. So, it follows that the commander's concern must not be restricted to on-base activities.

If you still feel that the reporting of off-base traffic violations to your base is an undue restriction of your personal freedom, ask yourself how you would go about measuring up to the responsibility of correcting and controlling marginal and dangerous drivers if *you* were a base commander. •

continued from back cover

MISS DRIVER

To Prevent Skids

- Keep tires properly inflated. Tire pressures on the same axle must be equal to prevent swerving while braking.
- Never jam on the brakes, pump them to avoid locking wheels.

If a Skid Starts

- Take your foot off the gas.
- Keep off the brakes; braking only makes the skid worse.
- Steer into the skid by turning wheels in the direction your rear wheels are sliding.
- When the car comes out of the skid, straighten the wheels and pump brakes gently to slow down. •

About Miss DRIVER

(See Back Cover)

Dark-haired, green-eyed, 5-foot-7 Jean Eaton of Highland, California, is a window display artist. Her hobbies and interests include fashion modeling, clothes designing, and winning modeling and beauty contests. At age 20 she has already become "Miss Highland" and "Miss Permatex" (San Bernardino area). She hopes to win the forthcoming nation-wide Miss Permatex title and become a professional fashion model. •

BACKFIRE

Address your letters to:
Editor
DRIVER Magazine
AFISC/SEDD
Norton AFB CA 92409

ON-CAR vs OFF-CAR WHEEL BALANCING

Your reference to "on-the-car" spin balancing as "dynamic" balancing in "Balanced Wheels Are a Bargain," Oct '72 DRIVER, is incorrect. Agreed it gives better results than bubble balancers, but true dynamic balance can be achieved only when the wheel is removed from the car and mounted on a dynamic balance machine. These machines allow balancing the tire in the lateral plane as well as the axial. That is, instead of splitting the indicated weight between inside and outside, these machines tell the operator specifically how much to add to either side.

Unfortunately, it is difficult to find a shop using these machines any more, because of the labor involved in removing wheels and the skill necessary to use them. When you do find one, it's more expensive. One tire store chain does fine work with true dynamic balancers at $3.00 per wheel, but you get what you pay for.

Maj Samuel E. Cook
Box 5386
Ft Worth TX 76108

We agree such shops are rare and expensive. That's why we stated there are several methods of checking "dynamic" balance (while the wheel is in motion), but that it is "usually" done by a special device which reads the balance as the wheel spins on the car. We felt it advisable to apprise our readers of the system we found to be more readily available and within their financial means, and would afford them an acceptable degree of dynamic (lateral) balance and safe operation of their private cars. They might get "true" lateral/axial balance in the shop, but we felt they should also be informed that those same "true" wheels, when reinstalled on an older car with worn bearings, hub and brake imbalance, out-of-round tires, etc, could still shimmy on the road. This could stress the suspension, steering system, and front-end assembly, and even throw the front end out of line, as well as cause steering difficulties, further mechanical wear, and possible failure. We had the wheels on two cars balanced via the static bubble-balancing and on-the-car dynamic-spin method, in turn, and were amazed at the great improvement brought about by the latter. For the new car that has larger, wider tires, and which is consistently checked and maintained by experts, the off-the-car spin-balancer would probably be just what the doctor ordered.

ANOTHER TIP FOR "SHE-ERS"

Here's a small, but important follow-up to Sgt Thomas Young's letter on skiing safety, Oct '72 DRIVER.

You should fasten your skis firmly to a secure rack, *but make sure the ski tips are facing the rear of the car.* Pointing the tips forward can cause a ski to be ripped loose by air currents. A ski striking the windshield of another car can be quite disastrous! So, please think about the car behind you, as well as the money you laid out for those new skis.

A1C David B. Parsons
2050 Comm Sq
Webb AFB TX 79720

RIDE TALL IN THE SADDLE . . . WITH THE TRAFFIC

I greatly enjoyed DRIVER's Oct '72 "Bicycle Survival" article. An avid cyclist for years, I can testify that seat style and position can do more to make cycling enjoyable (or miserable) than any other factor. Those 10-speed saddles are hard and narrow for a reason—they support in the right place and minimize chafing. Leather saddles take time to break in but, in the long run, prove far kinder to your posterior.

Saddle height should be adjusted so the foot must toe down at the bottom of the stroke in order to keep the ball of the foot on the pedal. This may seem ridiculously high to one not used to it, but will pay off in increased efficiency and reduced wear on the knee joints. Toe clips help keep the feet in position to produce max power, but should not be so tight you can't yank your foot out in an emergency.

Despite warnings to the contrary, an amazing number of cyclists *still* ride facing traffic. A cyclist absorbs some five times more destructive energy in a 15-mph glancing head-on collision with a car than he would in a similar overtaking accident.

1st Lt John R. Albrektson
Box 3053, Cambria CA 93428

TSgt Hank Krueger, DRIVER staff artist and author of the cycle article, is sold on "10-speeding" and agrees wholeheartedly with your views on safe and sane riding.

WANNA SET UP A DRAG STRIP?

First, this is to tell you how informative and useful DRIVER is to us. We use extracts from it in our troop info programs and safety bulletins. It is an extremely valuable adjunct to our safety program, and for this I thank you.

My second purpose is to request information on how to set up a drag strip. We have a deserted airstrip which is being used illegally for midnight drag racing, so there is an obvious need for a safe set-up. We need information relating to all aspects of such a project, from facilities and equipment to personnel and safety management. Any assistance will be greatly appreciated.

1st Lt P. C. G. Coulter, USMC
Safety Officer, Marine Barracks
FPO San Francisco 96630

Thanks for the Kudo, Lieutenant. Copies of Navy directives (SECNAV MSG 060245, 31 Oct '72, and SECNAVINST 5000.8B, 29 Jun '67) forwarded, along with sample motorsports club constitution; and the Jan '72 issue of DRIVER, carrying "More on Forming Automotive Clubs," gives all info USAF has on the subject. The

President, Sembach Timing Assoc, CMR Box 1878, Sembach AB, APO New York 09130 (see Oct '71 DRIVER) is an excellent source of info, as is Bernie Partridge, Regional Rep, National Hot Rod Association, P.O. Box 370, La Verne CA 91750.

Keep us posted, so we can publicize your efforts in "Motorsports Club News" and ease the way for other Marine Corps, Coast Guard, Navy, and Air Force people interested in similar projects.

CART BEFORE THE HORSE

In Oct '72 "Winter Is Here," you said to cover the battery terminals with grease or heavy oil to prevent corrosion. This may produce a bad connection. Use petroleum jelly.

ATCS Hubert J. L. Harris
FRAMP Tng, VAQ-30
NAS Alameda CA 94501

Agreed, petroleum jelly is very good for that purpose. Any type of lubricant could inhibit electrical flow if applied between terminal posts and clamps or allowed to seep into a loose connection. However, the probability of any lubricant causing a bad connection is slight if the connections are cleaned and tightened first, as suggested in the article.

WELL, IT'S A LONG STORY . . .

Concerning "A Look at What's Coming," Mar '72 DRIVER, improved rear-view mirrors have been around for quite some time. The rounded, panoramic mirror gives an image of traffic from both rear sides and behind, but distorts sense of distance, size, and shape. However, another type now available, some 30 inches long and with angled mirror surfaces, reflects true images from those areas.

I wonder why the demand hadn't been made earlier, that the manufacturers produce a better rear-view mirror; and why the Standard won't be effective until *after* the 1977 cars, trucks, and buses are produced. I am presently using one of the long, angled mirrors, and it is a blessing to me. Meanwhile, for those with the old types—BANG! WHAMM! CRASH!

SSgt Eugene McGowan, III
Box 2918, 376 Strat Wg (SAC)
APO San Francisco 96239

Ostensibly, the reason for the delay has been the inability of the car makers to meet government specifications for an indirect visibility system that will provide a sweeping rear view "presented on a single-image display." Meanwhile, the safety-conscious driver will have to search the market, as you have done, for a more effective mirror.

As many as 6 million vehicle accidents have been attributed to faulty rear vision annually for many years. So, our readers should be aware of the fact that the inadequacies include blocked rear windows as well as broken, frosted, dirty, discolored, or fogged-up windows and mirrors, and improperly adjusted, missing, or inadequate inside/outside mirrors.

Correcting these faults would make a sizeable dent in the 28 or more millions of accidents of that type which will otherwise occur during the 5 years preceding the effective date of the new Federal Standard.

WANTS BACK ISSUE

As a depository library at the university, we have a rather extensive collection of documents, and consider DRIVER a prize due to its popularity. We have it bound, complete, from past years, but are missing the Mar '72 issue. Thank you for whatever assistance you may be able to give.

M. Judy Luther
Documents Librarian
Stetson University
DeLand FL 32720

Thanks for your interest. Luckily, we had an extra copy in our very limited office supply. Please make future requests to the U.S. Government Printing Office, as indicated on the masthead page of DRIVER.

OUT OF THE PAST . . .

I am employed at the Williams AFB Library, where we display each month's DRIVER in our magazine rack and store all back copies for future use. They are in constant demand.

I am also Editor of the "ALPCA Newsletter," which deals mostly in auto license plate collecting and related subjects, and would appreciate permission to reprint "The Big Race," June '68 DRIVER. I am sure my 700 readers would enjoy reading about that fantastic 4,106-mile, coast-to-coast race. Keep up the fine work on DRIVER.

Roy A. Carson
P.O. Box 1017
Chandler AZ 85224

Permission granted. We had fun rereading the account of that historic 23-day race from New York to Seattle in 1909. The purpose was to promote better roads and prove the "newfangled contraption" could go just about anywhere. Author Jack B. Scott's father won the six-car race, adding a new page to the history of transportation.

(Ed Note) Roy would like to add your old license plates to his collection; all types, all years, from all states, provinces, and countries. He'll send postage to cover mailing costs. Also, if you know of any older ones or need help with your collection, drop him a line.

EVER BEEN SCALPED?

Your points on winter driving in the Oct '72 issue were well presented. Although the USAF bases in California seldom get snow, they are probably the hardest to get to from other states during winter weather. The southernmost route, Phoenix - Los Angeles, has very little snow. However, the central route, via Barstow, can get quite nasty in the Arizona mountains, and there are heavy fogs in the Bakersfield area. The northern route, via Reno, is even more of a challenge; the roadway is often closed, especially at the 7,000-foot level.

When leaving or entering the state via either the central or northern route, procure chains *before* you get into the mountains. Some "scalpers" will charge you four or five times their value if you get caught in the area where you'll need chains; and the same "scalping" goes on at motels. Charging snowbound tourists exhorbitant nightly rates is not uncommon. The trick is to plan the route, read weather reports, pay attention to your radio, and ask questions of the best source of travel information in the west—your friendly Highway Patrolmen.

Gabriel Sharp
GSO, 93 Bomb Wg (SAC)
Castle AFB CA 95342

MGB throttle cable hazard

A SSgt was ejected and killed recently when his '72 MGB-GT departed the road, struck a tree, and flipped end-over-end several times.

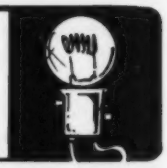
The primary cause of the accident was listed as speed too fast for road and weather conditions. However, another probable contributing factor came to light during the investigation which could have significance to our readers.

Investigators found 3 inches of accelerator cable wire extending past the carburetor throttle arm. (B) *When pressure was removed from the gas pedal, the wire tended to catch on other parts* (A) *and cause the throttle to remain open.*

Inspection of all '68 through '72 MGBs on base revealed a majority had the same discrepancy, but the wires had been bent down to clear other parts.

Check your throttle cable—this could happen to any car!

TIP of the month



QUICK STATIC TIME

A lot of people neglect ignition timing unnecessarily because they don't have a timing light, or are too rushed to follow the usual procedure. But this is not very wise, especially since *any* engine can be adequately timed very quickly and and easily using the static method.

If you don't have a timing light, use a simple 12-volt test lamp and follow these basic steps:

- Check your owner's manual or a service manual for your car's proper timing specification, and the location of the timing marks. (On most American cars, the timing marks are located on the lower front pulley, and the timing pointer is on the timing chain cover.)
- Connect one lead of the test lamp to the distributor side of the coil, and ground the other lead.
- Switch the ignition on. Loosen the distributor hold-down bracket and turn the distributor slowly counterclockwise or against the direction of shaft rotation until the test lamp glows.
- With the distributor in proper position (lamp glowing), tighten the bracket hold-down screw.

Ignition timing, however, is especially critical on the newer emission control engines, which require finer adjustments. Use of a stroboscopic light is recommended to get a more exact setting. •

AUTOMOTIVE emission control

Since DOD components have been charged with the responsibility of "leading the way" in USAF vehicle emission pollution abatement, Hq Central Air Force Region (AFRES) has collected pertinent data and instructions from state and local agencies as well as private companies.

Interested military units can contact Capt William M. Peoples, Chief, Transportation Div (TSLT), Directorate of Logistics, Hq Central Air Force Reserve Region (AFRES), Ellington AFB TX 77030. For those intersted in private vehicle pollution abatement measures, we have extracted the following information from one of the Reserve Region's Information Letters:

- For normal maintenance, the PCV (positive crankcase ventilation) valve should be checked every 6,000 miles or every 6 months and replaced at least each year. If it is clogged, the engine will lope and idle roughly. It must be replaced; *it cannot be cleaned satisfactorily.*
- To check the system, remove the oil filter cap with the engine running and feel for a slight vacuum pull against your hand when it is pressed over the pipe. No vacuum or a positive pressure means the valve, hoses, and connections should be checked; *or,*
- use a tachometer. Remove the valve from the rocker cover grommet and block the valve opening. A decrease of *less* than 50 rpm indicates a plugged valve or hose. *Or,*
- install a new valve. If engine operation smooths out, leave it in; if not, check the line.

Watch for more extracts from the Information Letters in forthcoming issues of DRIVER, covering other control systems, anti-smog tune-up procedure, conversion kits, emission tester, and why the rotary engine is cleaner. •

☆U.S. GOVERNMENT PRINTING OFFICE: 1973—789-413/4

"Well, Mr. Asbill, the car costs $6,000 . . . but the smog-control device is 12 grand."

Miss DRIVER

JEAN EATON

"You might think that drivers in sunny California and other mild climes don't have many problems dealing with slippery roads. That's not true at all. In fact, fair-weather drivers often blow it when they find themselves in rain or snow. It's apparently too much of an adjustment to suddenly have to slow down and take special precautions. But I know DRIVER readers are a different sort, and will be particularly interested in the following skid-prevention/correction hints from the Tire Industry Safety Council."

continued on page 25